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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,775	02/02/2004	Hal Dwayne Lilley	4429	7079
45295	7590	10/17/2005	EXAMINER	
FLOYD B. CAROTHERS CAROTHERS AND CAROTHERS 445 FORT PITT BOULEVARD, SUITE 500 PITTSBURGH, PA 15219			TRAN, DALENA	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



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10/768,775

EXAMINER
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ART UNIT	PAPER
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20051013

DATE MAILED:

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Commissioner for Patents

# Office Action Summary

Application No.

10/768,775

Applicant(s)

LILLEY, HAL DWAYNE

Examiner

Dalena Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 3-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 5 is/are allowed.
- 6) ☒ Claim(s) 3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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## DETAILED ACTION

### Notice to Applicant(s)

1. This office action is responsive to the amendment filed on 7/20/05. As per request, claims 1-2 have been cancelled. Claims 3-5 have been added. Thus, claims 3-5 are pending.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 3, is rejected under 35 U.S.C. 103(a) as being unpatentable over Langston (6,739,556) in view of Byrd et al. (6,262,656), and Craig (6,658,572).

As per claim 3, Langston discloses a computer hardware / software system for commercial aircraft which is linked with various other system in an aircraft and programmed to take control of, but not limited to, take off procedures, climb out, flight navigation, and landing (see at least column 2, lines 3-60; and columns 3-4, lines 7-51), computer system further programmed whereby when once it has been turned on, from either inside or outside the aircraft, cannot be shut off or interrupted (see at least columns 8-9, lines 10-4). Langston does not disclose the computer will shut itself off to be reset. However, Byrd et al. disclose a computer hardware / software system once triggered, the system cannot be shut off, interrupted, or disabled, and the computer will shut itself off (see at least column 14, lines 24-49). Eventhough Byrd et al. disclose a computer security system in a vehicle. However, it is obvious that the system disclose in Byrd et al. can be integrated to an aircraft in Langston et al. system, because it

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is a hardware / software system of a navigation security system in general for anti-carjacking, and also, it is obvious that once the system cannot be shut off, interrupted, or disabled, all software sequence will continue to run until the software program have been completed to prevent unauthorized control of use of vehicle.

Also, to modify for the teach of Langston, Craig discloses the take control cannot be shut off or interrupted until all sequences of the take control software programs have been completed whereupon the computer will then shut itself off to be reset in order to prevent unauthorized use of the landed aircraft (see at least column 10, lines 23-44; and columns 10-11, lines 63-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Langston by combining the computer will shut itself off to be reset to make sure all sequence software has been run complete for each procedures in flight navigation, and cannot be interrupted by hijacking intended to take over the control system and crashing of an aircraft into a building, for providing safety.

4. Claims 4-5, are allowable.

#### **Remarks**

5. Applicant's argument filed on 7/20/05 has been fully considered. Upon updated search, the new ground of rejection has been set forth as above.

Applicant's argue on page 3, last paragraph of the amendment that "the only reason Byrd teaches that one should cause a computer to shut down is to minimize power consumption". However, Byrd discloses in column 14, lines 45-49, that the software system also provides security to assure that once triggered, the system of the invention cannot be disabled by anyone that does not have the legitimate owner's personal identification number. Also, Byrd discloses in

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column 1, lines 16-17, Byrd system stop or deter the unauthorized use of theft of a vehicle.

Therefore, Byrd system disclose a computer hardware / software system once triggered, the system cannot be shut off, interrupted, or disabled, and the computer will shut itself off with the purpose of security to prevent unauthorized use of vehicle (see at least column 14, lines 24-25; lines 42-48).

It is proper that the system disclose in Byrd et al. can be integrated to an aircraft in Langston et al. system, because it is a hardware / software system of a navigation security system in general for anti-carjacking, to prevent unauthorized used of the vehicle (see Langston in the abstract; also, see Byrd et al., column 1, lines 10-18).

The new reference Craig, as cited in item 3 above, for modifying the teach of Langston by combining a hardware / software system cannot be shut off or interrupt to prevent unauthorized use of the landed aircraft.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The examiner can normally be reached on M-F 6:30 AM-4:00 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner  
Dalena Tran



October 13, 2005